

Titles of most frequently occurring classifications of patents returned
from a search of 10573310 on Sep 10 , 2009

- 12 704/500 (6 OR, 6 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/500 . AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION
- 7 356/511 (6 OR, 1 XR)
Class 356 OPTICS: MEASURING AND TESTING
356/450 . BY LIGHT INTERFERENCE (E.G., INTERFEROMETER)
356/496 .. For dimensional measurement
356/511 ... Contour or profile
- 7 356/497 (2 OR, 5 XR)
Class 356 OPTICS: MEASURING AND TESTING
356/450 . BY LIGHT INTERFERENCE (E.G., INTERFEROMETER)
356/496 .. For dimensional measurement
356/497 ... Having short coherence length source
- 7 704/219 (2 OR, 5 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/219 ... Linear prediction
- 6 704/E19.005 (0 OR, 6 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS
TECHNIQUES FOR REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR
DECODING OF SPEECH OR AUDIO SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR
AUDIO SIGNALS, E.G., SOURCE-FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC.
(EPO)
704/E19.005 .. Multichannel audio signal coding and decoding,
i.e., using interchannel correlation to reduce redundancies, e.g.,
joint-stereo, intensity-coding, matrixing, etc. (EPO)
- 6 704/207 (3 OR, 3 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/205 ... Frequency
704/206 Specialized information
704/207 Pitch
- 5 704/205 (0 OR, 5 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING
704/ 201 .. For storage or transmission
704/ 205 ... Frequency

5 704/ E19.02 (0 OR, 5 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION
704/ E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS- SYNTHESIS
TECHNIQUES FOR REDUNDANCY REDUCTION, E. G., IN VOCODERS, ETC.; CODING OR
DECODING OF SPEECH OR AUDIO SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR
AUDIO SIGNALS, E. G., SOURCE- FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC.
(EPO)
704/ E19.01 .. Using spectral analysis, e. g., transform
vocoders, subband vocoders, perceptual audio coders, psychoacoustically
based lossy encoding, etc., e. g., MPEG audio, Dolby AC-3, etc. (EPO)
704/ E19.02 ... Using orthogonal transformation (EPO)

5 375/ E1.002 (0 OR, 5 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/ E1.001 . SPREAD SPECTRUM TECHNIQUES IN GENERAL (EPO)
375/ E1.002 .. Using direct sequence modulation (EPO)

4 381/ 23 (3 OR, 1 XR)
Class 381 ELECTRICAL AUDIO SIGNAL PROCESSING SYSTEMS AND
DEVICES
381/ 1 . BINAURAL AND STEREOPHONIC
381/ 19 .. Quadrasonic
381/ 20 ... Matrix
381/ 21 4-2-4
381/ 23 With encoder

4 375/ 285 (1 OR, 3 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/ 259 . SYSTEMS USING ALTERNATING OR PULSATING CURRENT
375/ 285 .. Antinoise or distortion

4 375/ 216 (2 OR, 2 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/ 216 . APPARATUS CONVERTIBLE TO ANALOG

4 704/ 200.1 (2 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION
704/ 200 . SPEECH SIGNAL PROCESSING
704/ 200.1 .. Psychoacoustic

4 382/ 248 (1 OR, 3 XR)
Class 382 IMAGE ANALYSIS
382/ 232 . IMAGE COMPRESSION OR CODING
382/ 248 .. Transform coding

4 704/ 501 (1 OR, 3 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/500 . AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION
704/501 .. With content reduction encoding

4 704/220 (0 OR, 4 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/220 ... Analysis by synthesis

4 704/230 (0 OR, 4 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/230 ... Quantization

4 375/E1.02 (0 OR, 4 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/E1.001 . SPREAD SPECTRUM TECHNIQUES IN GENERAL (EPO)
375/E1.002 .. Using direct sequence modulation (EPO)
375/E1.02 ... Interference-related aspects (EPO)

4 704/208 (2 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/205 ... Frequency
704/206 Specialized information
704/207 Pitch
704/208 Voiced or unvoiced

4 704/E11.006 (0 OR, 4 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/E11.001 . MISCELLANEOUS ANALYSIS OR DETECTION OF SPEECH
CHARACTERISTICS (EPO)
704/E11.006 .. Pitch determination of speech signals (EPO)

3 455/143 (0 OR, 3 XR)
Class 455 TELECOMMUNICATIONS
455/130 . RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
CONVERTER
455/142 .. Convertible to different type (e.g., AM to FM)
455/143 ... With distinct signal path for each type

3 375/260 (2 OR, 1 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/259 . SYSTEMS USING ALTERNATING OR PULSATING CURRENT

- 375/260 .. Plural channels for transmission of a single pulse train
- 3 708/5 (1 OR, 2 XR)
 Class 708 ELECTRIC AL COMPUTERS: ARITHMETIC PROCESSING AND CALCULATING
 708/1 . ELECTRIC AL HYBRID CALCULATING COMPUTER
 708/3 .. Particular function performed
 708/5 ... Correlation, convolution, or transformation
- 3 381/66 (2 OR, 1 XR)
 Class 381 ELECTRIC AL AUDIO SIGNAL PROCESSING SYSTEMS AND DEVICES
 381/66 . DEREVERBERATORS
- 3 356/512 (1 OR, 2 XR)
 Class 356 OPTICS: MEASURING AND TESTING
 356/450 . BY LIGHT INTERFERENCE (E. G., INTERFEROMETER)
 356/496 .. For dimensional measurement
 356/511 ... Contour or profile
 356/512 By wavefront detection
- 3 704/203 (2 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/203 ... Transformation
- 3 375/240 (2 OR, 1 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/240 . BANDWIDTH REDUCTION OR EXPANSION
- 3 704/E11.007 (0 OR, 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E11.001 . MISCELLANEOUS ANALYSIS OR DETECTION OF SPEECH CHARACTERISTICS (EPO)
 704/E11.007 .. Voiced-unvoiced decision (EPO)
- 3 704/E19.017 (0 OR, 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR REDUNDANCY REDUCTION, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E. G., SOURCE-FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.01 .. Using spectral analysis, e. g., transform vocoders, subband vocoders, perceptual audio coders, psychoacoustically based lossy encoding, etc., e. g., MPEG audio, Dolby AC-3, etc. (EPO)
 704/E19.015 ... Quantization or dequantization of spectral

component s (EPO)

704/ E19. 017 Vect or quant izati on, e. g. , Twi n- VQ audi o, et c.
(EPO)

3 704/ E19. 041 (0 OR, 3 XR)
Cl ass 704 DATA PROCESSI NG: SPEECH SI GNAL PROCESSI NG,
LI NGUI STI CS, LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON
704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSI S- SYNTHESI S
TECHNI QUES FOR REDUNDANCY REDUCTI ON, E. G. , I N VOCODERS, ETC. ; CODI NG OR
DECODI NG OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR
AUDI O SI GNALS, E. G. , SOURCE- FI LTER MODELS, PSYCHOACOUSTI C ANALYSI S, ETC.
(EPO)

704/ E19. 023 . . Using predicti ve techni ques; codecs based on
source- filter model izati on (EPO)

704/ E19. 039 . . . Details of speech and audi o coders (EPO)

704/ E19. 04 Vocoder archi tecture (EPO)

704/ E19. 041 Vcoders using mul ti ple modes (EPO)

3 704/ E19. 002 (0 OR, 3 XR)
Cl ass 704 DATA PROCESSI NG: SPEECH SI GNAL PROCESSI NG,
LI NGUI STI CS, LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON
704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSI S- SYNTHESI S
TECHNI QUES FOR REDUNDANCY REDUCTI ON, E. G. , I N VOCODERS, ETC. ; CODI NG OR
DECODI NG OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR
AUDI O SI GNALS, E. G. , SOURCE- FI LTER MODELS, PSYCHOACOUSTI C ANALYSI S, ETC.
(EPO)

704/ E19. 002 . . Perceptual measures for quality assessment (EPO)

3 348/ 473 (3 OR, 0 XR)
Cl ass 348 TELEVI SI ON
348/ 469 . FORMAT
348/ 473 . . Incl udi ng addi ti onal i nformati on

3 375/ E7. 001 (0 OR, 3 XR)
Cl ass 375 PULSE OR DI GI TAL COMMUNI CATI ON S
375/ E7. 001 . SYSTEMS FOR THE TRANSM SSI ON OF TELEVI SI ON
SI GNALS USI NG PULSE CODE MODULATI ON (EPO)

3 704/ 216 (2 OR, 1 XR)
Cl ass 704 DATA PROCESSI NG: SPEECH SI GNAL PROCESSI NG,
LI NGUI STI CS, LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON
704/ 200 . SPEECH SI GNAL PROCESSI NG
704/ 201 . . For storage or transmi ssi on
704/ 211 . . . Ti me
704/ 216 Correl ati on functi on

3 704/ E19. 009 (0 OR, 3 XR)
Cl ass 704 DATA PROCESSI NG: SPEECH SI GNAL PROCESSI NG,
LI NGUI STI CS, LANGUAGE TRANSLATI ON, AND AUDI O COMPRESSI ON/ DECOMPRESSI ON
704/ E19. 001 . SPEECH OR AUDI O SI GNAL ANALYSI S- SYNTHESI S
TECHNI QUES FOR REDUNDANCY REDUCTI ON, E. G. , I N VOCODERS, ETC. ; CODI NG OR
DECODI NG OF SPEECH OR AUDI O SI GNALS; COMPRESSI ON OR EXPANSI ON OF SPEECH OR

AUDIO SIGNALS, E. G., SOURCE-FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC.
(EPO)

704/E19.009 .. Audio watermarking, i.e., embedding inaudible data in the audio signal (EPO)

2 375/346 (0 OR, 2 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/316 . RECEIVERS
375/346 .. Interference or noise reduction

2 375/270 (0 OR, 2 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/259 . SYSTEMS USING ALTERNATING OR PULSATING CURRENT
375/268 .. Amplitude modulation
375/270 ... Vestigial or single sideband or suppressed carrier

2 455/65 (1 OR, 1 XR)
Class 455 TELECOMMUNICATIONS
455/39 . TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
455/63.1 .. Distortion, noise, or other interference prevention, reduction, or compensation
455/65 ... Anti-multipath

2 700/94 (1 OR, 1 XR)
Class 700 DATA PROCESSING: GENERIC CONTROL SYSTEMS OR SPECIFIC APPLICATIONS
700/90 . SPECIFIC APPLICATION, APPARATUS OR PROCESS
700/94 .. Digital audio data processing system

2 375/259 (2 OR, 0 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/259 . SYSTEMS USING ALTERNATING OR PULSATING CURRENT

2 725/22 (0 OR, 2 XR)
Class 725 INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
725/22 . COMMERCIAL OR PROGRAM AIRING VERIFICATION SYSTEM

2 375/E7.211 (0 OR, 2 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/E7.001 . SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)
375/E7.026 .. Using bandwidth reduction; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing thereof (EPO)
375/E7.211 ... Involving transform and predictive coding, e.g., hybrid coding, Motion Picture Experts Group (MPEG) coding (EPO)

2 704/211 (0 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING

704/201 .. For storage or transmission
704/211 ... Time

2 379/406.13 (0 OR, 2 XR)
Class 379 TELEPHONE COMMUNICATIONS
379/406.01 . ECHO CANCELLATION OR SUPPRESSION
379/406.06 .. Using digital signal processing
379/406.12 ... Frequency domain analysis
379/406.13 Fourier analysis

2 704/201 (0 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission

2 704/204 (0 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/203 ... Transformation
704/204 Orthogonal functions

2 704/258 (1 OR, 1 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/258 .. Synthesis

2 382/250 (0 OR, 2 XR)
Class 382 IMAGE ANALYSIS
382/232 . IMAGE COMPRESSION OR CODING
382/248 .. Transform coding
382/250 ... Discrete cosine or sine transform

2 704/229 (0 OR, 2 XR)
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
704/200 . SPEECH SIGNAL PROCESSING
704/201 .. For storage or transmission
704/229 ... Adaptive bit allocation

2 375/344 (1 OR, 1 XR)
Class 375 PULSE OR DIGITAL COMMUNICATIONS
375/316 . RECEIVERS
375/344 .. Automatic frequency control

2 370/208 (0 OR, 2 XR)
Class 370 MULTIPLEX COMMUNICATIONS
370/203 . GENERALIZED ORTHOGONAL OR SPECIAL MATHEMATICAL
TECHNIQUES

370/208 .. Particular set of orthogonal functions

2 381/93 (2 OR, 0 XR)
 Class 381 ELECTRIC AL AUDIO SIGNAL PROCESSING SYSTEMS AND
 DEVICES
 381/93 . FEEDBACK SUPPRESSION

2 381/94.1 (1 OR, 1 XR)
 Class 381 ELECTRIC AL AUDIO SIGNAL PROCESSING SYSTEMS AND
 DEVICES
 381/94.1 . NOISE OR DISTORTION SUPPRESSION

2 381/83 (0 OR, 2 XR)
 Class 381 ELECTRIC AL AUDIO SIGNAL PROCESSING SYSTEMS AND
 DEVICES
 381/77 . ONE-WAY AUDIO SIGNAL PROGRAM DISTRIBUTION
 381/82 .. Public address system
 381/83 ... Feedback suppression

2 704/200 (1 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING

2 381/1 (0 OR, 2 XR)
 Class 381 ELECTRIC AL AUDIO SIGNAL PROCESSING SYSTEMS AND
 DEVICES
 381/1 . BINAURAL AND STEREOPHONIC

2 704/214 (1 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/211 ... Time
 704/214 Voiced or unvoiced

2 704/221 (0 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/221 ... Pattern matching vocoders

2 348/461 (0 OR, 2 XR)
 Class 348 TELEVISION
 348/461 . NONPICTORIAL DATA PACKET IN TELEVISION FORMAT

2 348/475 (0 OR, 2 XR)
 Class 348 TELEVISION
 348/469 . FORMAT
 348/473 .. Including additional information

348/ 475 ... Additional modulation of picture carrier (e.g., quadrature)

2 380/ 252 (0 OR, 2 XR)
 Class 380 CRYPTOGRAPHY
 380/ 252 . ELECTRIC SIGNAL MASKING

2 704/ E19.019 (0 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING,
 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION
 704/ E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS- SYNTHESIS
 TECHNIQUES FOR REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR
 DECODING OF SPEECH OR AUDIO SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR
 AUDIO SIGNALS, E.G., SOURCE- FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC.
 (EPO)

704/ E19.01 ... Using spectral analysis, e.g., transform
 vocoders, subband vocoders, perceptual audio coders, psychoacoustically
 based lossy encoding, etc., e.g., MPEG audio, Dolby AC-3, etc. (EPO)

704/ E19.018 ... Using subband decomposition (EPO)

704/ E19.019 Subband vocoders (EPO)